

[Three Piece Timing Pulley Assembly containing one Inner Positive Drive Hubless and Flangeless Timing Pulley and two Outer Driven, Positive Drive, and Synchronized Timing Pulleys]

Abstract

This hybrid pulley assembly is comprised of two outer driven synchronized timing pulleys and a centerpiece inner driver timing pulley. This pulley assembly operates in such a manner where the input driving timing belt mounted on the centerpiece timing pulley positively drives the outer synchronized timing pulleys. An outer driven timing belt, which is mounted on the outer driven timing pulleys and across the centerpiece driver timing belt, is partially supported by the centerpiece driver timing belt top surface in the area enclosed by the two outer synchronized timing pulleys. This configuration allows this hybrid pulley assembly to be driven from within. This alleviates the need of conventional drive train systems where a timing driven belt is driven through an axial input to the driven timing pulley.